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Division of Astronomical Sciences (AST)

Directorate for Mathematical and Physical Sciences

National Science Foundation

NSF's Mission

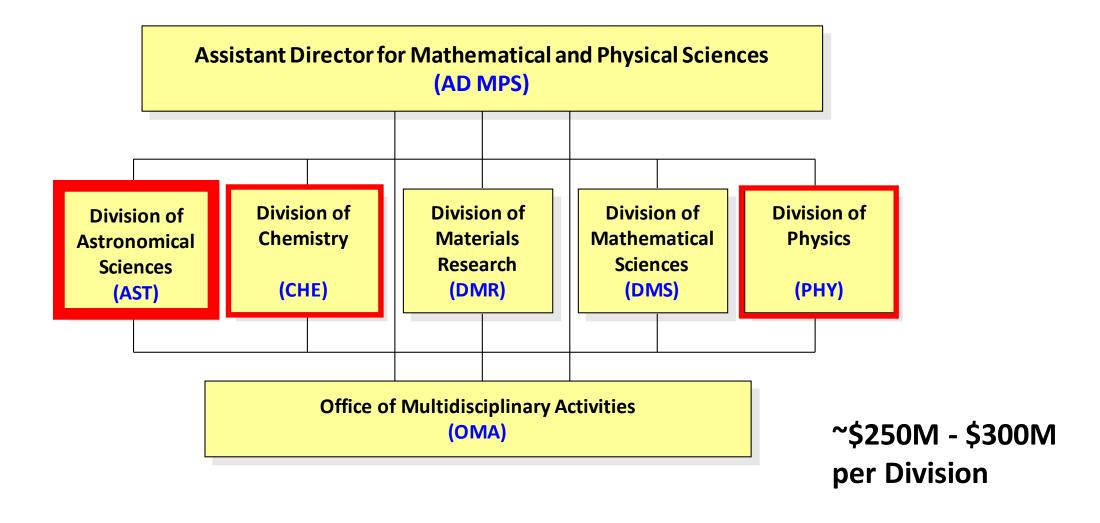


To promote the progress of science; to advance the national health, prosperity, and welfare; and to secure the national defense; and for other purposes.

--from The National Science Foundation Act of 1950 (P.L. 81-507)





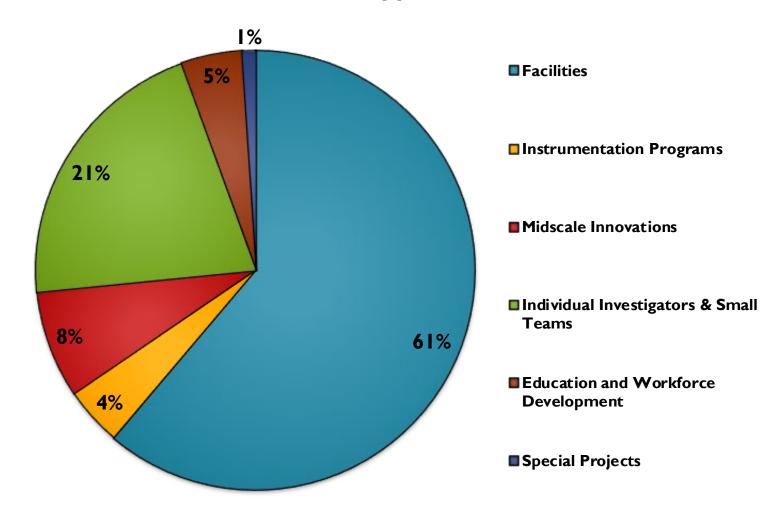


Funding Distribution in AST



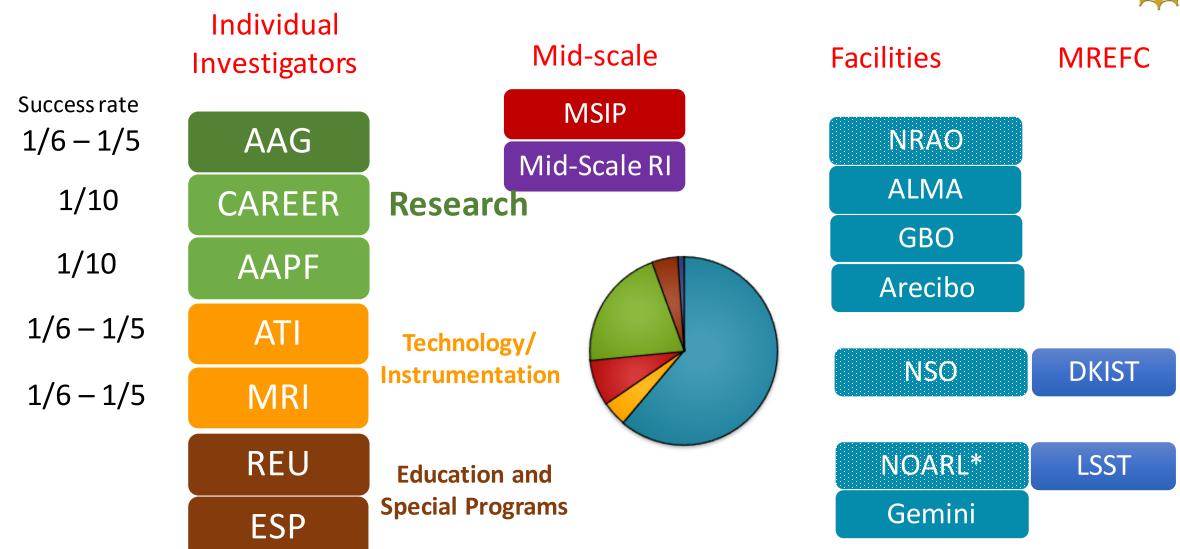
Total ~ \$247M

Modes of Support FY2016



AST Division Programs





Laboratory Astrophysics Portfolio



Atoms

Enabling science

Molecules

Experimental and theoretical studies of properties and processes important to astronomy

Astrophysical plasmas

Dust & Ices

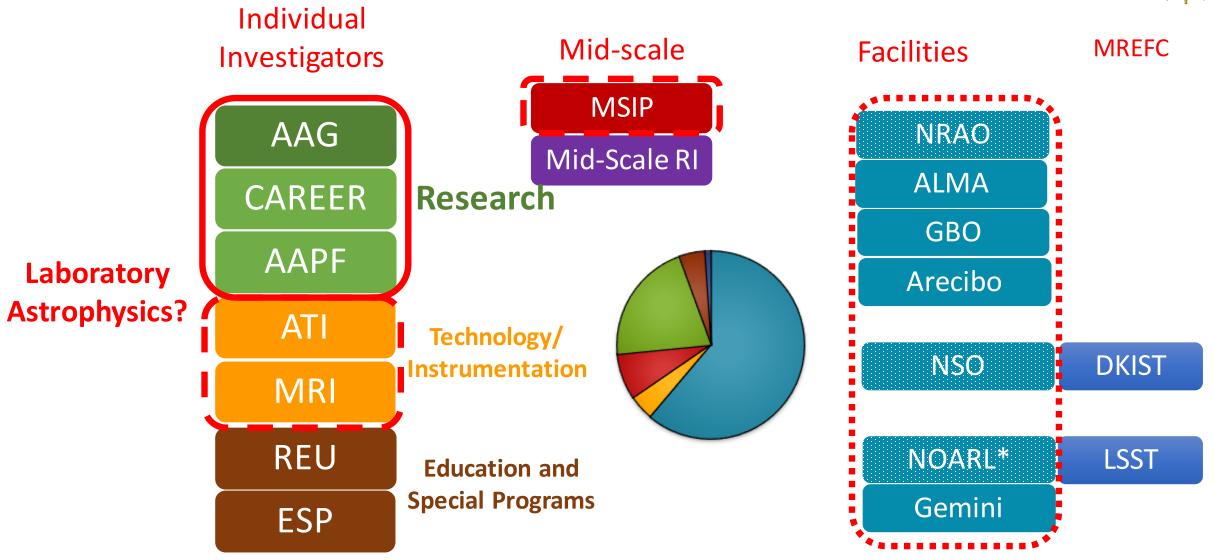
Serves a critical need

Accurate interpretation of astronomical phenomena

Optimum exploitation of NSF-AST **Facilities**

AST Division Programs





Where does Laboratory Astrophysics fit in?



Within AST's research programs – AAG, CAREER, AAPF – as well as other programs, but:

The astronomical context must be clearly demonstrated.

- AAG reviews 15-25 lab astro projects annually ~3%-5% of total reviewed
 - > Funding commensurate with this level
- Synergy with sister Divisions co-review and co-funding:
 - PHY: AMO (Theory & Experiment); Plasma Physics (incl. NSF/DOE Partnership in Basic Plasma Science & Engineering)
 - CHE: CSDM-A (Physical Chemistry); CSDM-B (Physical Organic and Inorganic Chemistry)

Summary



- NSF-AST's "mission" is to promote the progress of basic research in astronomy
- Laboratory Astrophysics fits within that mission
- Community establishes research priorities
 - Proposal pressure
 - Needs and interests of astronomy community (e.g., Facilities, WoU:MMA)
- This panel:
 - ➤ Identify how agencies and the laboratory astrophysics community could better cooperate to promote the progress of astronomy

